**Listing of Claims:**

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application. Material to be inserted is in **bold and underline**, and material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[ ]].

Please amend claims 1, 2, 4, 13, 15 and 16 as indicated.

Please add new claims 17–19.

1. (Currently Amended) A method for producing an oxide superconductor comprising: placing a precursor of an oxide superconductor ~~in a state where it is~~ on a substrate material containing pure metal or a compound which is meltable in the precursor when the precursor is ~~in a~~ partially molten ~~state~~, and producing the oxide superconductor by partial melting and solidifying the precursor in said state.

2. (Currently Amended) The method for producing an oxide superconductor according to claim 1, wherein the substrate material consists of a pure metal or compound which is meltable in the partially molten precursor uniformly, and ~~which does not allow formation of~~ **the pure metal or compound does not provide** a portion **in the oxide superconductor, where** ~~, at which~~ a reaction proceeds spontaneously **and** ~~to form~~ stress concentration cracks **form** resulting from a difference in the coefficients of thermal expansion between the substrate material and the oxide superconductor.

3. (Original) The production method of an oxide superconductor according to claim 1, wherein the oxide superconductor is an RE-Ba-Cu-O based oxide superconductor, and the RE represents a rare earth element, and the substrate material is a material that contains Ba or Cu in a

molten state but does not contain a rare earth element.

4. (Currently Amended) The production method of an oxide superconductor according to claim 1, wherein, after placing an intermediate layer containing at least one selected from the group consisting of $Y_2O_3$, $Yb_2O_3$, $Er_2O_3$, $Ho_2O_3$, $Dy_2O_3$, $Eu_2O_3$, $Sm_2O_3$, $Gd_2O_3$, $ZrO_2$, $Al_2O_3$, $BaZrO_3$, MgO and yttrium stabilized zirconia on a mount made of a heat-resistant material, the substrate material is placed on ~~the mount~~ **the intermediate layer**, and the precursor of the oxide superconductor is placed on the substrate material for conducting partial melting and solidification of the precursor.

5. (Original) The production method of an oxide superconductor according to claim 1, wherein the substrate material contains at least one selected from the group consisting of a pure metal of Ba or Cu, oxides, composite oxides, carbonates, sulfides, sulfates, chlorides, hydroxides and nitrates of Ba or Cu.

6. (Original) The production method of an oxide superconductor according to claim 5, wherein the oxide, composite oxide, carbonate, sulfide, sulfate, chloride, hydroxide or nitrate of Ba or Cu is BaO, CuO, $Cu_2O$, $BaCuO_2$ , $BaCO_3$, $CuCO_3$, BaS, CuS, $BaSO_4$, $CuSO_4$, $BaCl_2$, CuCl, $CuCl_2$, $Ba(OH)_2$, $Cu(OH)_2$, $Ba(NO_3)_2$ or $Cu(NO_3)_2$.

7. (Original) The production method of an oxide superconductor according to any one of claims 3 to 6, wherein the substrate material comprises at least one selected from noble metals including Ag, Au, Pt and Pd and their oxides.

8.–12. (Canceled)

13. (Currently Amended) An RE-Ba-Cu-O based oxide superconductor, wherein RE represents a rare earth element, and the oxide superconductor includes a portion **solidified after melting and exposed to the outside**, ~~which is solidified after melting and~~ **wherein the solidified portion** contains one of or both of Ba and Cu but does not contain a rare earth element ~~, on an outside face of the oxide superconductor~~, and the solidified portion ~~corresponds to~~ **is generated from a molten reaction between a precursor of the RE-Ba-Cu-O superconductor and** a substrate material which is used for supporting [[a]] **the** precursor ~~of the RE-Ba-Cu-O based oxide superconductor~~ when the precursor ~~was~~ **is** melted and solidified.

14. (Original) The oxide superconductor according to claim 13, wherein at least one selected from noble metals including Ag, Au, Pt and Pd is additionally contained in the solidified portion.

15. (Currently Amended) The oxide superconductor according to claim 13, wherein the solidified portion is formed in ~~the~~ **a** bottom of the oxide superconductor **where the precursor contacts the substrate material when the precursor is melted and solidified**.

16. (Original) The oxide superconductor according to any of claims 13 to 15, wherein **the** trapped magnetic field **distribution of a top surface of the oxide superconductor is the same as the trapped magnetic field distribution of a bottom surface of the oxide superconductor where the substrate material contacts the precursor when the precursor is melted and solidified** ~~distributions on the top side and bottom side of the oxide superconductor are similar~~.

17. (New) The oxide superconductor according to claim 13, wherein the oxide superconductor is produced by the method comprising:

placing a precursor of an oxide superconductor on a substrate material containing pure

metal or a compound which is meltable in the precursor when the precursor is partially molten, and producing the oxide superconductor by partial melting and solidifying the precursor in said state; wherein the solidified portion is not an oxide superconductor.

18. (New) The production method of an oxide superconductor according to claim 1, wherein the precursor of an oxide superconductor is a compact of a mixture of raw materials, and the mixture of raw materials has the same or a similar composition as a composition of the oxide superconductor.

19. (New) The production method of an oxide superconductor according to claim 1, wherein the substrate material is not a superconductor.